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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/527,752	10/24/2005	Takeshi Sasaki	Q84850	9167

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EXAMINER	
VO, HAI	

ART UNIT	PAPER NUMBER
1771	

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08/20/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/527,752	SASAKI ET AL.	
	Examiner	Art Unit	
	Hai Vo	1771	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *18 July 2007*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-21* is/are pending in the application.

4a) Of the above claim(s) *9-13,15 and 19-21* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-8, 17 and 18* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *07/18/2007*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

1. All of the art rejections are maintained.
2. The 112 claim rejections are considered moot in view of the present arguments.
3. Rejections of claim 18 under 35 U.S.C. 101 have been withdrawn in view of the present amendments.

Election/Restrictions

4. Applicant's election of Group I, claims 1-8, 17 and 18 in the reply filed on 07/18/2007 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).
5. Newly submitted claims 19-21 are directed to an invention that is independent or distinct from the invention originally claimed for the same reasons set forth in the previous Office Action mailed 04/18/2007.

   Since applicants have received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 9-13, 15, and 19-21 are withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.
6. As the method claims depend from claim 1, the method claims will be rejoined with the product claims upon indication of the product claims as being allowable.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

9. Claims 1-8, 17 and 18 rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over JP 2002-209822. JP'822 discloses a porous film consisting of a polymetaphenylene isophthalamide, having micropores distributed in the entire surface of the porous film (paragraph 1, abstract). The porous film has a porosity of 40 to 90% and the open area of 10 to 70% on the film surface. The porous film has an average pore size of 0.5 to 20 microns at the film surface (paragraph 5). The porous film is about 25 μm thick (paragraph 4). The claims do not require the porosity of two surfaces be different. The inorganic salt can be added with an amount from 0 to 50 wt% based on 100 wt% of the polymer (paragraph 13). Likewise, the presence of the inorganic salt is optional. JP'822 does not specifically disclose the heat of fusion, heat shrinkage, water permeability and gas permeability. However, those properties would be inherently present because JP'822 uses the same material as Applicants to form a porous film which has porosity, open area ratio of two

surfaces, an average pore size on the film surface within the claimed ranges. This is in line with *In re Spada*, 15 USPQ 2d 1655 (1990) which holds that products of identical chemical composition can not have mutually exclusive properties. It seems from the claim, if one meets the structure recited, the properties must be met or Applicant's claim is incomplete.

It has been held that a recitation with respect to the manner in which a claimed blank is intended to be employed does not differentiate the claimed porous film from a prior art cleaning sheet satisfying the claimed structural limitations. *Ex parte Masham*, 2 USPQ2d 1647 (1987). Accordingly, JP'822 anticipates or strongly suggests the claimed subject matter.

10. Claims 1-8, 17 and 18 rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over WO 01/19906. US 2004/0161598 to Ohno et al will be relied on as an equivalent form of WO 01/19906 for convenience. Ohno discloses a porous film consisting of a polymetaphenylene isophthalamide having continuous pores with a gas permeability of 0.2 to 1000 ml/sec (paragraphs 21 and 44). The porous film has a porosity of 60 to 80% (paragraph 22). The porous film is about 1 to 10 μm thick (paragraph 24). The claims do not require the porosity of two surfaces be different. Ohno discloses the porous film having the gas permeability retention of 98% after heat treatment at 350°C for 10 mins, compared to before treatment (paragraphs 21 and example 5). This indicates the porous film has excellent heat resistance. There is no indication of using an inorganic salt for forming a

porous film (example 1). Ohno does not specifically disclose an open area on both of two surfaces of porous film, an average pore size on both surfaces, heat of fusion and water permeability. However, Ohno uses the same materials and the same approach to form the porous film. The coagulating bath contains PEG which is a polyhydric alcohol substance. The film of the present invention and that of Ohno would have the same surface characteristics. Hence, it is the examiner's position that those physical properties would be inherently present. This is also in line with *In re Spada*, 15 USPQ 2d 1655 (1990).

It has been held that a recitation with respect to the manner in which a claimed porous film is intended to be employed does not differentiate the claimed porous film from a prior art porous film satisfying the claimed structural limitations. *Ex parte Masham*, 2 USPQ2d 1647 (1987). Accordingly, Ohno anticipates or strongly suggests the claimed subject matter.

Response to Arguments

11. The art rejections over JP'822 have been maintained for the following reasons. Applicants argue that since JP'822 uses a different process to form the porous film, JP'822 fails to teach or suggest the difference 0-40% in the open areas of two surfaces. The examiner respectfully disagrees. The examiner directs Applicants' attention to Table 1, comparative example 2 of the present invention. The coagulating bath of the comparative example 2 contains neither polyhydric alcohol substances nor C5-19 hydrocarbons. The porous film of comparative example 2 has a difference of 15% in the open areas of two surfaces, which is

within the claimed range. Likewise, Applicants' arguments are in conflict with what is shown in the specification of the present invention. Turning to the JP'822 reference, the porous film has an open area of 10 to 70% and the mean pore size of 0.5 to 20 microns on the film surface (abstract). As the porous film of JP'822 is made from the same process as shown in comparative example 2, i.e., the coagulating bath of the does not contain any polyhydric alcohol substances and C5-19 hydrocarbons, both surfaces of the JP'822 porous film would inherently have a difference of 15% in the open areas of two surfaces. This meets the requirements set forth in the claims. Accordingly, the art rejections are sustained.

12. The art rejections over Ohno have been maintained for the following reasons. Applicants argue that since Ohno uses a different process to form the porous film, Ohno fails to teach or suggest the open area of 20 to 70% on both of two surfaces of the porous film as well as the difference 0-40% in the open areas of two surfaces. The examiner respectfully disagrees. The examiner directs Applicants' attention to paragraph 101. The coagulating bath of Ohno contains PEG which is a polyhydric alcohol substance. The film of the present invention and that of Ohno would have the same surface characteristics. Applicants further argue that the film of the comparative example 1 has a high porosity of 83% but its surface open area was extremely low and non-uniform. The arguments are found irrelevant to the surface morphology of the Ohno film. As previously discussed, the coagulating bath of Ohno includes PEG which is a

polyhydric alcohol substance. Therefore, the porous film of Ohno is structurally the same as that of the present invention because the same materials and the same process are employed. Accordingly, the art rejections over Ohno are sustained.

Conclusion

13. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hai Vo whose telephone number is (571) 272-1485. The examiner can normally be reached on Monday through Thursday, from 9:00 to 6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on (571) 272-1478. The fax

phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

HV

/Hai Vo/
Primary Examiner, Art Unit 1771